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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,527	12/05/2001	Clifford A. Mohwinkel	ENW326	2816

7590 12/02/2003  
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EXAMINER

RAIZEN, DEBORAH A

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/010,527

Applicant(s)

MOHWINKEL, CLIFFORD A.

Examiner

Deborah A. Raizen

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5, 8, 9, 12, 13, 18, 19, 21-25 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 9, 12 and 18 is/are allowed.
- 6) ☒ Claim(s) 5, 13, 19, 21-25, and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1) ☐ Certified copies of the priority documents have been received.  
2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 23 recites the limitation "said main body" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 5, 13, 19, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Koch et al. (4,564,277). In regard to claim 5, Koch discloses an imaging system (Fig. 1, labeled "prior art", but showing the physical structure of the disclosed system; Fig. 5; and Fig. 6) comprising:  
an object plane (G in Fig. 1) that defines an object plane axis perpendicular to said object plane (a line drawn perpendicularly to G);

an image-receiving device (focusing screen 25 or film carried by film carrier 21; col. 3, lines 2-4) positioned oblique to said object plane axis (Fig. 1);

a lens (23) positioned oblique to said object plane axis (Fig. 1); and

a motor system (Fig. 5) that manipulates said image-receiving device and said lens such that the object plane is in focus on said image-receiving device (col. 14, lines 42-53 and 65-68).

In regard to claim 13, Koch discloses a method of focusing an object plane, comprising the steps of:

providing an image-receiving device (25) along an optical axis (Q) positioned oblique to an object plane (Fig. 1);

providing a lens (23) along said optical axis (Fig. 1);

positioning said image-receiving device so that an image-receiving plane (P) of said image-receiving device intersects said object plane at a Scheimpflug line (S, Fig. 1; col. 14, lines 65-68);

positioning said lens so that a lens plane (O) of said lens intersects said object plane at said Scheimpflug line (S, Fig. 1), such that the object plane is in focus on said image-receiving device (col. 14, lines 65-68 and col. 1, lines 29-34); and

providing a motor system for moving said image-receiving device with respect to said object plane and for moving said lens with respect to said object plane (col. 14, lines 42-53).

In regard to claim 19, Koch discloses an optical device comprising:

an image-receiving device adjustably positioned along an optical axis oblique to an object plane (Fig. 1);

a lens adjustably positioned along said optical axis (Fig. 1); and

a computer system for automatically manipulating said image-receiving device and said lens such that the object plane is in focus on said image-receiving device (Fig. 5: calculator 50; col. 14, line 8 to col. 15, line 19).

In regard to claim 21, in the Koch system, the motor system comprises a first motor that manipulates said image-receiving device (any one of motors 101-103) and a second motor that manipulates said lens (motors 104-106).

In regard to claim 22, in the Koch system, the motor system manipulates a position of said image-receiving device and a position of said lens with respect to said object plane, the imaging system further comprising a computer system adapted for sensing a position of said image-receiving device and a position of said lens with respect to said object plane (with electrical signal emitters 90-99) and for controlling said motor system so as to manipulate a position of said image-receiving device and a position of said lens such that the object plane is in focus on said image-receiving device (col. 14, line 8 to col. 15, line 19).

In regard to claim 23, as understood, in the Koch system, said main body (understood to have the image-receiving device mounted on it; bellows 24) defines an optical axis (Q) that extends from said main body to a point where said object plane axis intersects said object plane

(the point where the extension of Q intersects G defines the location of the perpendicular object plane axis), wherein said object plane axis and said optical axis define an acute angle (Fig. 1, with the object plane axis drawn perpendicularly to G at the point of intersection with Q), and said computer system senses a position of said image-receiving device by measuring said angle and by measuring a distance of said image-receiving device from said object plane along said optical axis (this functional limitation is met by the Koch system because the computer system senses the position of the image-receiving device with electrical signal emitters 90-92; furthermore, the positional information provided by 90-92 yields the angle between the object plane axis and optical axis, as well as the distance from the film carrier to the object plane; col. 14, lines 8-41 and col. 2, line 64 to col. 4, line 20).

In regard to claim 24, the Koch method further comprises providing a computer system for controlling said motor system so that the entire object plane is in focus on said image-receiving device (Fig. 5: Calculator 50; col. 1, lines 29-34 and col. 14 line 8 to col. 15, line 19).

In regard to claim 25, in the Koch method the computer system includes a position sensor for sensing a position of said image-receiving device and a position of said lens with respect to said object plane (electrical signal emitters 90-95, which, along with emitters 96, 97 or 98, 99, determine the positions of the device and lens with respect to the object plane; col. 14, lines 8-41).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al. in view of Mahon et al. (EP 1 014 438 A2, cited as Boyle et al. in paper no. 3; a copy of this reference is not provided with the current action because it has been provided in the previous action). Koch discloses an inspection device (intended use that does not provide a structural limitation; the camera shown in Fig. 1) comprising:  
a lens (23; Fig. 1) that defines a lens plane (O in Fig. 1);  
an image-receiving device (25 in Fig. 1) that defines an image-receiving device plane (P in Fig. 1);  
a workpiece (M in Fig. 1; see also MPEP 2115) that defines a work plane (G);  
wherein said lens plane, said image-receiving device plane, and said work plane are aligned according to a Scheimpflug principle (Fig. 1 and col. 14, lines 65-68); and  
a motor system (101 to 106 in Fig. 5) for aligning said lens and said image-receiving device (col. 14, lines 65-68), wherein said motor system includes a sensor for sensing angle information of a position of said lens with respect to said work plane (electrical signal emitters 93-95 provide the information, Fig. 5) and angle information of a position of said image-receiving device with respect to said work plane (90-92, Fig. 5) to achieve alignment of the lens and the image-receiving device according to the Scheimpflug principle (col. 14, line 8 to col. 15, line 19).

However, Koch does not disclose that the image-receiving device is electronic. Mahon discloses an inspection device that satisfies the Scheimpflug principle, in which the image-receiving device is electronic (page 6, lines 16-29). Furthermore, an electronic image-receiving device has many advantages, some of which are size reduction, image-storage capacity, and ease of processing. Therefore, it would have been obvious to one of ordinary skill in the art to provide an electronic image-receiving device, as disclosed in Mahon, as the image-receiving device in the Koch system because it would allow for size reduction, storage, and ease of processing.

***Allowable Subject Matter***

7. Claims 8, 9, 12, and 18 are allowed.

See paper no. 3 for reasons for allowance. Also, it is important to emphasize again here that it is the combination of all the limitations in each of the claims that makes them allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Although applicant asserts that the claims rewritten in independent form include limitations of claims from which they depend, the rewritten claims omit significant limitations (including claim 19, in which the word "entire", which appeared in line 2 of the original claim, is



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omitted; the omission is not indicated in the amended claims). Therefore, the examiner's previous indication of allowable subject matter with respect to the subject matter of the claims rejected above is withdrawn. However, the current action is not made final because the new grounds of rejection presented here were arguably not necessitated by applicant's amendment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Raizen whose telephone number is (703) 305-7940. The examiner can normally be reached on Monday-Friday, from 9:30 a.m. to 2:30 p.m. EST (a part-time schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dar



Georgia Epps  
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